I claim:

1. A method of embedding a watermark into a halftone image, the image comprising a cluster of halftone dots, said method comprising the steps of:

5   providing a watermark to alter the cluster of halftone dots by toggling boundary pixels of the halftone dots; and

embedding the watermark in the image.

2. The method according to claim 1, wherein the step of embedding comprises

10   the step of gradually changing the halftone dots.

3. The method according to claim 1, further comprising the step of toggling boundary pixels on or off to grow or shrink the halftone dots.

15   4. An apparatus to embed a watermark in a halftone image, said apparatus comprising:

an encoder to toggle halftone data values at an outer boundary of a cluster of halftone dots of the halftone image.

20   5. The apparatus according to claim 4, wherein said encoder effects a change in the image's luminance.

6. A method of embedding a watermark into a halftone image comprising the steps of:

25   selecting a block of halftone dots in the halftone image; and

adding or subtracting halftone dots in the block to achieve a change in luminance.